11-17-06

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PTO/SB/21 (09-04)
Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE


# TRANSMITTAL FORM

*(to be used for all correspondence after initial filing)*

Total Number of Pages in This Submission: 47

| | |
|---|---|
| Application Number | 10/766,097 |
| Filing Date | January 27, 2004 |
| First Named Inventor | Rickard John Terrell |
| Art Unit | 3641 |
| Examiner Name | John W. Eldred |
| Attorney Docket Number | LMORIN1260-1 |

## ENCLOSURES *(Check all that apply)*

- [✓] Fee Transmittal Form
  - [ ] Fee Attached
- [✓] Amendment/Reply
  - [ ] After Final
  - [ ] Affidavits/declaration(s)
- [ ] Extension of Time Request
- [ ] Express Abandonment Request
- [ ] Information Disclosure Statement
- [ ] Certified Copy of Priority Document(s)
- [ ] Reply to Missing Parts/ Incomplete Application
  - [ ] Reply to Missing Parts under 37 CFR 1.52 or 1.53
- [ ] Drawing(s)
- [ ] Licensing-related Papers
- [✓] Petition
- [ ] Petition to Convert to a Provisional Application
- [ ] Power of Attorney, Revocation Change of Correspondence Address
- [ ] Terminal Disclaimer
- [ ] Request for Refund
- [ ] CD, Number of CD(s) _____
  - [ ] Landscape Table on CD
- [ ] After Allowance Communication to TC
- [ ] Appeal Communication to Board of Appeals and Interferences
- [ ] Appeal Communication to TC **(Appeal Notice, Brief, Reply Brief)**
- [ ] Proprietary Information
- [ ] Status Letter
- [✓] Other Enclosure(s) (please Identify below):
  1. Petition for Revival of An Application for Patent Abandoned Unintentionally Under 37 CFR 1.137(b)
  2. Declaration of Ta-Tanisha L. Moore with Exhibits A and B
  3. Return Postcard

**Remarks**

The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number 07-1896. A duplicate copy of this form is enclosed.

## SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

| | | | |
|---|---|---|---|
| Firm Name | DLA Piper US LLP | | |
| Signature | Gerald Sekimura | | |
| Printed name | Gerald T. Sekimura | | |
| Date | November 15, 2006 | Reg. No. | 30,103 |

## CERTIFICATE OF TRANSMISSION/MAILING

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below:

| | | | |
|---|---|---|---|
| Signature | See attached express mail certificate | | |
| Typed or printed name | Ta-Tanisha L. Moore | Date | November 15, 2006 |

| CERTIFICATE OF MAILING BY "EXPRESS MAIL" (37 CFR 1.10) | | | Docket No. LMORIN1260-1 |
|---|---|---|---|
| Applicant(s): Rickard John Terrell | | | |
| Serial No. 10/766,097 | Filing Date January 27, 2004 | Examiner J. W. ELDRED | Group Art Unit 3641 |

Invention:

**SYSTEM AND METHOD FOR THE DEFENSE OF AIRCRAFT AGAINST MISSILE ATTACK**

I hereby certify that this TRANSMITTAL FORM (PTO/SB/21)
*(Identify type of correspondence)*
is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 in an envelope addressed to: Mail Stop Petitions, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on November 15, 2006.

Ta-Tanisha Moore
*(Typed or Printed Name of Person Mailing Correspondence)*

*(Signature of Person Mailing Correspondence)*

**EV 866302618US**
*("Express Mail" Mailing Label Number)*

PTO/SB/17 (01-06)
Approved for use through 07/31/2006. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE


*Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818).*

# FEE TRANSMITTAL
## For FY 2006

☑ Applicant claims small entity status. See 37 CFR 1.27

**TOTAL AMOUNT OF PAYMENT** ($) 750.00

| *Complete if Known* | |
|---|---|
| Application Number | 10/766,097 |
| Filing Date | January 27, 2004 |
| First Named Inventor | Rickard John Terrell |
| Examiner Name | John W. Eldred |
| Art Unit | 3641 |
| Attorney Docket No. | LMORIN1260-1 |

**METHOD OF PAYMENT** (check all that apply)

☐ Check ☐ Credit Card ☐ Money Order ☐ None ☐ Other (please identify): _____

☑ Deposit Account Deposit Account Number: 07-1896 Deposit Account Name: DLA Piper US LLP

For the above-identified deposit account, the Director is hereby authorized to: (check all that apply)

☑ Charge fee(s) indicated below ☐ Charge fee(s) indicated below, **except for the filing fee**

☑ Charge any additional fee(s) or underpayments of fee(s) under 37 CFR 1.16 and 1.17 ☑ Credit any overpayments

**WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.**

**FEE CALCULATION (All the fees below are due upon filing or may be subject to a surcharge.)**

### 1. BASIC FILING, SEARCH, AND EXAMINATION FEES

| | FILING FEES | | SEARCH FEES | | EXAMINATION FEES | | |
|---|---|---|---|---|---|---|---|
| | | Small Entity | | Small Entity | | Small Entity | |
| **Application Type** | **Fee ($)** | **Fee ($)** | **Fee ($)** | **Fee ($)** | **Fee ($)** | **Fee ($)** | **Fees Paid ($)** |
| Utility | 300 | 150 | 500 | 250 | 200 | 100 | |
| Design | 200 | 100 | 100 | 50 | 130 | 65 | |
| Plant | 200 | 100 | 300 | 150 | 160 | 80 | |
| Reissue | 300 | 150 | 500 | 250 | 600 | 300 | |
| Provisional | 200 | 100 | 0 | 0 | 0 | 0 | |

### 2. EXCESS CLAIM FEES

| Fee Description | Fee ($) | Small Entity Fee ($) |
|---|---|---|
| Each claim over 20 (including Reissues) | 50 | 25 |
| Each independent claim over 3 (including Reissues) | 200 | 100 |
| Multiple dependent claims | 360 | 180 |

| Total Claims | Extra Claims | Fee ($) | Fee Paid ($) |
|---|---|---|---|
| _____ - 20 or HP = | _____ | x _____ | = _____ |

HP = highest number of total claims paid for, if greater than 20.

| Indep. Claims | Extra Claims | Fee ($) | Fee Paid ($) |
|---|---|---|---|
| _____ - 3 or HP = | _____ | x _____ | = _____ |

HP = highest number of independent claims paid for, if greater than 3.

| Multiple Dependent Claims | |
|---|---|
| **Fee ($)** | **Fee Paid ($)** |
| _____ | _____ |

### 3. APPLICATION SIZE FEE

If the specification and drawings exceed 100 sheets of paper (excluding electronically filed sequence or computer listings under 37 CFR 1.52(e)), the application size fee due is $250 ($125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

| Total Sheets | Extra Sheets | Number of each additional 50 or fraction thereof | Fee ($) | Fee Paid ($) |
|---|---|---|---|---|
| _____ - 100 = | _____ / 50 = | _____ (round **up** to a whole number) | x _____ | = _____ |

### 4. OTHER FEE(S)

| | Fees Paid ($) |
|---|---|
| Non-English Specification, $130 fee (no small entity discount) | |
| Other (e.g., late filing surcharge): Petition to Revive Unintentionally Abandoned Application | $750.00 |

| SUBMITTED BY | | | |
|---|---|---|---|
| Signature |  | Registration No. (Attorney/Agent) 30,103 | Telephone (415) 836-2500 |
| Name (Print/Type) | Gerald T. Sekimura | | Date November 15, 2006 |

PTO/SB/64 (10-05)
Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

# PETITION FOR REVIVAL OF AN APPLICATION FOR PATENT ABANDONED UNINTENTIONALLY UNDER 37 CFR 1.137(b)

Docket Number (Optional): LMORIN1260-1

First named inventor: Rickard John Terrell

Application No.: 10/766,097 Art Unit: 3641

Filed: January 27, 2004 Examiner: John W. Eldred

Title: SYSTEM AND METHOD FOR THE DEFENSE OF AIRCRAFT AGAINST MISSILE ATTACK

Attention: Office of Petitions
**Mail Stop Petition**
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450
FAX (571) 273-8300

NOTE: If information or assistance is needed in completing this form, please contact Petitions Information at (571) 272-3282.

The above-identified application became abandoned for failure to file a timely and proper reply to a notice or action by the United States Patent and Trademark Office. The date of abandonment is the day after the expiration date of the period set for reply in the office notice or action plus an extensions of time actually obtained.

APPLICANT HEREBY PETITIONS FOR REVIVAL OF THIS APPLICATION

NOTE: A grantable petition requires the following items:
(1) Petition fee;
(2) Reply and/or issue fee;
(3) Terminal disclaimer with disclaimer fee - required for all utility and plant applications filed before June 8, 1995; and for all design applications; and
(4) Statement that the entire delay was unintentional.

1. Petition fee

☑ Small entity-fee $ 750.00 (37 CFR 1.17(m)). Applicant claims small entity status. See 37 CFR 1.27.

☐ Other than small entity – fee $ _____ (37 CFR 1.17(m))

2. Reply and/or fee

A. The reply and/or fee to the above-noted Office action in the form of Response to Office Communication Dated March 23, 2006 (identify type of reply):

☑ has been filed previously on March 31, 2006 (original enclosed).
☐ is enclosed herewith.

B. The issue fee and publication fee (if applicable) of $ _____.

☐ has been paid previously on _____.
☐ is enclosed herewith.

3. Terminal disclaimer with disclaimer fee

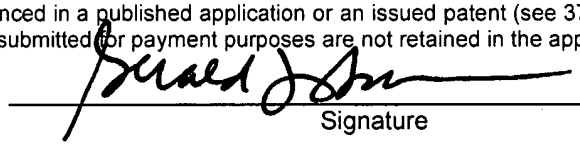
☐ Since this utility/plant application was filed on or after June 8, 1995, no terminal disclaimer is required.

☐ A terminal disclaimer (and disclaimer fee (37 CFR 1.20(d)) of $ _____ for a small entity or $ _____ for other than a small entity) disclaiming the required period of time is enclosed herewith (see PTO/SB/63).

4. STATEMENT: The entire delay in filing the required reply from the due date for the required reply until the filing of a grantable petition under 37 CFR 1.137(b) was unintentional. [NOTE: The United States Patent and Trademark Office may require additional information if there is a question as to whether either the abandonment or the delay in filing a petition under 37 CFR 1.137(b) was unintentional (MPEP 711.03(c), subsections (III)(C) and (D)).]

**WARNING:**

Petitioner/applicant is cautioned to avoid submitting personal information in documents filed in a patent application that may contribute to identity theft. Personal information such as social security numbers, bank account numbers, or credit card numbers (other than a check or credit card authorization form PTO-2038 submitted for payment purposes) is never required by the USPTO to support a petition or an application. If this type of personal information is included in documents submitted to the USPTO, petitioners/applicants should consider redacting such personal information from the documents before submitting them to the USPTO. Petitioner/applicant is advised that the record of a patent application is available to the public after publication of the application (unless a non-publication request in compliance with 37 CFR 1.213(a) is made in the application) or issuance of a patent. Furthermore, the record from an abandoned application may also be available to the public if the application is referenced in a published application or an issued patent (see 37 CFR 1.14). Checks and credit card authorization forms PTO-2038 submitted for payment purposes are not retained in the application file and therefore are not publicly available.



Signature

November 15, 2006
Date

Gerald T. Sekimura
Typed or printed name

30,103
Registration Number, if applicable

153 Townsend Street, Suite 800, San Francisco, CA 94107
Address

(415) 836-2500
Telephone Number

Address

Enclosures:
☐ Fee Payment
☑ Reply
☐ Terminal Disclaimer Form
☐ Additional sheets containing statements establishing unintentional delay
☑ Other: Declaration of Tat-Tanisha L. Moore

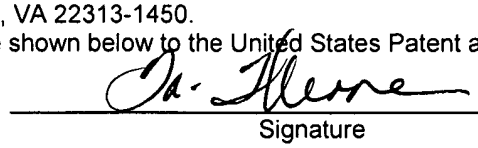
CERTIFICATE OF MAILING OR TRANSMISSION [37 CFR 1.8(a)]

I hereby certify that this correspondence is being:

☑ Deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to: Mail Stop Petition, Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450.

☐ Transmitted by facsimile on the date shown below to the United States Patent and Trademark Office as (571) 273-8300.

November 15, 2006
Date



Signature

Ta-Tanisha L. Moore
Typed or printed name of person signing certificate

| | | | |
|---|---|---|---|
| Appl. No. | : | 10/766,097 | Confirmation No. 3201 |
| Applicant | : | John Terrell Rickard | |
| Filed | : | January 27, 2004 | |
| TC/A.U. | : | 3644 | |
| Examiner | : | John W. Eldred | |
| Docket No. | : | 328424-165027 | |
| Customer No. | : | 29585 | |

Commissioner for Patents
P.O. Box 1450
Alexandria VA 22313-1450

## PETITION TO WITHDRAW NOTICE OF ABANDONMENT

Sir:

Applicant hereby submits this petition to have the Notice of Abandonment, mailed October 27, 2006, withdrawn.

As set forth in the accompanying Declaration of Ta-Tanisha Moore, a response was timely sent via facsimile to the United States Patent and Trademark Office within the extended period for response. The facsimile confirmation issued by the facsimile machine that was used indicates that all pages of the response were successfully transmitted. Following notice from the United States Patent and Trademark Office that all pages had not been received, a second submission of the response was made on March 31, 2006 directly to the Examiner at his request. It was not until the present Notice of Abandonment was received, that the undersigned had any notice that the submission of March 31, 2006 was not received.

Since the error was not on the Applicant's part, it is hereby respectfully requested the petition fee be waived. To the extent this petition is denied, applicant hereby submits a petition for revival of an unintentional abandoned application.

Respectfully submitted,

DLA Piper US LLP

Dated: November 15, 2006

By: _____

Gerald T. Sekimura
Reg. No. 30,103
Tel.: (415) 836-2500

Attn. Patent Department
DLA Piper US LLP
153 Townsend Street, Suite 800
San Francisco, CA 94107-1957

| | | | | |
|---|---|---|---|---|
| Appl. No. | : | 10/766,097 | Confirmation No. | 3201 |
| Applicant | : | John Terrell Rickard | | |
| Filed | : | January 27, 2004 | | |
| TC/A.U. | : | 3644 | | |
| Examiner | : | John W. Eldred | | |
| Docket No. | : | 328424-165027 | | |
| Customer No. | : | 29585 | | |

Mail Stop Petition
Commissioner for Patents
P.O. Box 1450
Alexandria VA 22313-1450

## DECLARATION OF TA-TANISHA L. MOORE

1. I declare that I am an employee with DLA Piper US LLP. On January 9, 2006, I caused a Response to Office Action Dated July 7, 2005 to be faxed to the United States Patent and Trademark Office at facsimile number (571) 273-8300. Attached as Exhibit A is a true and correct copy of the facsimile transmission confirmation report indicating that all 28 pages had been received. On March 23, 2006, our office received an Office Communication noting the response filed January 9, 2006 was not considered responsive.

2. On March 30, 2006, I had a conversation with Examiner John W. Eldred of the United States Patent and Trademark Office regarding the Office Communication dated March 23, 2006 during which I informed him that our facsimile machine receipt indicated that all 28 pages had been received.

3. On March 31, 2006, at the request of Examiner John W. Eldred, I re-faxed the previously filed Response dated January 9, 2006 along with a transmittal letter and a Response to the Office Communication dated March 23, 2006 which totaled 32 pages directly to his facsimile number - (571) 273-6901. A true and correct copy of the 32 pages along with my firm's facsimile transmittal confirmation sheet are attached hereto

as Exhibit B. No further word was received at that time that any pages were missing or that the document was not received.

4. On October 31, 2006, our office received a Notice of Abandonment dated October 27, 2006 indicating that the application had become abandoned for failure to timely reply to the Office letter mailed March 23, 2006. A true and correct copy of the Notice of Abandonment is attached hereto as Exhibit C.

5. On November 7, 2006, I spoke with Examiner John W. Eldred regarding the Notice of Abandonment and our previous discussion of March 30, 2006 about the Office Communication dated March 23, 2006. Examiner John W. Eldred confirmed his recollection regarding the March 30th discussion, but noted that unfortunately the Response re-faxed on March 31, 2006 never reached his desk and resulted in the application's abandonment.

6. Examiner John W. Eldred acknowledged the error and requested that a Petition to Revive the Application along with the response previously sent on January 9, 2006 and March 31, 2006 be re-sent to the Office to revive the application.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Executed this 15th day of November 2006.

Ta-Tanisha L. Moore

********************
*** TX REPORT ***
********************

TRANSMISSION OK

| | |
|---|---|
| TX/RX NO | 1328 |
| CONNECTION TEL | 915712738300 |
| SUBADDRESS | |
| CONNECTION ID | |
| ST. TIME | 01/09 15:23 |
| USAGE T | 05'27 |
| PGS. SENT | 28 |
| RESULT | OK |

DLA PIPER RUDNICK GRAY CARY

DLA Piper Rudnick Gray Cary US LLP
153 Townsend Street, Suite 800
San Francisco, California 94107-1957
O 415.836.2576
F 415.836.2501
W www.dlapiper.com

# FAX TRANSMISSION COVER SHEET

January 9, 2006

| To: | Telephone: | Fax Number: |
|---|---|---|
| Attn.: Group Art Unit 3644<br>United States Patent and Trademark Office | (571) 272-6901 | (571) 273-8300 |

From: Gerald T. Sekimura
(Reg. No. 30,103)
415.836.2500

Client-Matter Number: 328424-165027

Re: U.S. Patent Application No. 10/766,097
Filing Date: January 27, 2004
First Named Inventor: John Terrell Rickard
Art Unit: 3644
Examiner: John W. Eldred
Attorney Docket No.: LMORIN1260-1

Pages: - 29 - (including this form) Originals:

**If there is a problem with this transmission, please call _____ at _____**

**Fax Operator/Ext.**

**Message:**

Please see attached for filing in the above-identified U.S. patent application.

**********
*** TX REPORT ***
**********

TRANSMISSION OK

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| TX/RX NO | 0392 |
| CONNECTION TEL | 915712736901 |
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| PGS. SENT | 32 |
| RESULT | OK |

SENT

DLA PIPER RUDNICK GRAY CARY

**DLA Piper Rudnick Gray Cary US LLP**
153 Townsend Street, Suite 800
San Francisco, California 94107-1957
O 415.836.2576
F 415.836.2501
W www.dlapiper.com

# FAX TRANSMISSION COVER SHEET

**March 31, 2006**

| To: | Telephone: | Fax Number: |
|---|---|---|
| **Attn.: Group Art Unit 3644 United States Patent and Trademark Office** | **(571) 272-6901** | **(571) 273-6901** |

From: Gerald T. Sekimura
(Reg. No. 30,103)
415.836.2500

Client-Matter Number: 328424-165027

Re: U.S. Patent Application No. 10/766,097
Filing Date: January 27, 2004
First Named Inventor: John Terrell Rickard
Art Unit: 3644
Examiner: John W. Eldred
Attorney Docket No.: LMORIN1260-1

Pages: - 33 - (including this form) Originals:

**If there is a problem with this transmission, please call _____ at _____**

**Fax Operator/Ext.**

**Message:**

Please see attached for filing in the above-identified U.S. patent application.

DLA PIPER RUDNICK GRAY CARY

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153 Townsend Street, Suite 800
San Francisco, California 94107-1957
O 415.836.2576
F 415.836.2501
W www.dlapiper.com

# FAX TRANSMISSION COVER SHEET

March 31, 2006

| To: | Telephone: | Fax Number: |
|---|---|---|
| **Attn.: Group Art Unit 3644 United States Patent and Trademark Office** | **(571) 272-6901** | **(571) 273-6901** |

From: Gerald T. Sekimura
(Reg. No. 30,103)
415.836.2500

Client-Matter Number: 328424-165027

Re: U.S. Patent Application No. 10/766,097
Filing Date: January 27, 2004
First Named Inventor: John Terrell Rickard
Art Unit: 3644
Examiner: John W. Eldred
Attorney Docket No.: LMORIN1260-1

Pages: - 33 - (including this form) Originals:

**If there is a problem with this transmission, please call _____ at _____**

**Fax Operator/Ext.**

**Message:**

Please see attached for filing in the above-identified U.S. patent application.

PTO/SB/21 (09-04)
Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

# TRANSMITTAL FORM

*(to be used for all correspondence after initial filing)*

Total Number of Pages in This Submission: 32

| | |
|---|---|
| Application Number | 10/766,097 |
| Filing Date | January 27, 2004 |
| First Named Inventor | John Terrell Rickard |
| Art Unit | 3644 |
| Examiner Name | John W. Eldred |
| Attorney Docket Number | LMORIN1260-1 |

## ENCLOSURES *(Check all that apply)*

- ☐ Fee Transmittal Form
  - ☐ Fee Attached
- ☐ Amendment/Reply
  - ☐ After Final
  - ☐ Affidavits/declaration(s)
- ☐ Extension of Time Request
- ☐ Express Abandonment Request
- ☐ Information Disclosure Statement
- ☐ Certified Copy of Priority Document(s)
- ☐ Reply to Missing Parts/ Incomplete Application
  - ☐ Reply to Missing Parts under 37 CFR 1.52 or 1.53
- ☐ Drawing(s)
- ☐ Licensing-related Papers
- ☐ Petition
- ☐ Petition to Convert to a Provisional Application
- ☐ Power of Attorney, Revocation Change of Correspondence Address
- ☐ Terminal Disclaimer
- ☐ Request for Refund
- ☐ CD, Number of CD(s) _____
  - ☐ Landscape Table on CD
- ☐ After Allowance Communication to TC
- ☐ Appeal Communication to Board of Appeals and Interferences
- ☐ Appeal Communication to TC **(Appeal Notice, Brief, Reply Brief)**
- ☐ Proprietary Information
- ☐ Status Letter
- ☑ Other Enclosure(s) (please Identify below):
  Resubmission of complete Amendment filed January 9, 2006

**Remarks**

The Director is hereby authorized to charge any fees which may be required, or credit any overpayment, to Deposit Account No. 07-1896. A duplicate copy of this sheet is enclosed.

## SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

| | | | |
|---|---|---|---|
| Firm Name | DLA Piper Rudnick Gray Cary US LLP | | |
| Signature | Gerald T. Sekimura | | |
| Printed name | Gerald T. Sekimura | | |
| Date | 3/30/06 | Reg. No. | 30,130 |

## CERTIFICATE OF TRANSMISSION/MAILING

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below:

| | | | |
|---|---|---|---|
| Signature | Ta Tanisha Moore | | |
| Typed or printed name | Ta-Tanisha L. Moore | Date | |

| | | | |
|---|---|---|---|
| Appl. No. | : | 10/766,097 | Confirmation No. 3201 |
| Applicant | : | John Terrell Rickard | |
| Filed | : | January 27, 2004 | |
| TC/A.U. | : | 3644 | |
| Examiner | : | John W. Eldred | |
| Docket No. | : | 328424-165027 | |
| Customer No. | : | 29585 | |

Commissioner for Patents
P.O. Box 1450
Alexandria VA 22313-1450

**RESPONSE TO OFFICE COMMUNICATION DATED MARCH 23, 2006**

Sir:

Responsive to the Official Communication, mailed March 23, 2006, and having a shortened statutory period for response of one (1) month, enclosed herewith is the resubmission of the Response to Office Action Dated July 7, 2005 which was previously filed on January 9, 2006. Copies of the accompany transmittal papers also filed with the response on January 9, 2006 are enclosed herewith.

Reconsideration of the subject application, as amended, is respectfully requested.

Respectfully submitted,
DLA Piper Rudnick Gray Cary US LLP

Dated: March 30, 2006

By: _____
Gerald T. Sekimura
Reg. No. 30,103
Tel.: (415) 836-2500

Attn. Patent Department
DLA Piper Rudnick Gray Cary US LLP
153 Townsend Street, Suite 800
San Francisco, CA 94107-1957

**********************
*** TX REPORT ***
**********************

TRANSMISSION OK

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| SUBADDRESS | |
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| RESULT | OK |

DLA PIPER RUDNICK GRAY CARY

DLA Piper Rudnick Gray Cary US LLP
153 Townsend Street, Suite 800
San Francisco, California 94107-1957
O 415.836.2576
F 415.836.2501
W www.dlapiper.com

# FAX TRANSMISSION COVER SHEET

January 9, 2006

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|---|---|---|
| Attn.: Group Art Unit 3644<br>United States Patent and Trademark Office | (571) 272-6901 | (571) 273-8300 |

From: Gerald T. Sekimura
(Reg. No. 30,103)
415.836.2500

Client-Matter Number: 328424-165027

Re: U.S. Patent Application No. 10/766,097
Filing Date: January 27, 2004
First Named Inventor: John Terrell Rickard
Art Unit: 3644
Examiner: John W. Eldred
Attorney Docket No.: LMORIN1260-1

Pages: - 29 - (including this form) Originals:

If there is a problem with this transmission, please call _____ at _____

Fax Operator/Ext.

Message:

Please see attached for filing in the above-identified U.S. patent application.

DLA PIPER RUDNICK GRAY CARY

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January 9, 2006

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| **Attn.: Group Art Unit 3644<br>United States Patent and Trademark Office** | | **(571) 273-8300** |

From: Gerald T. Sekimura
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Client-Matter Number: 328424-165027

Re: U.S. Patent Application No. 10/766,097
Filing Date: January 27, 2004
First Named Inventor: John Terrell Rickard
Art Unit: 3644
Examiner: John W. Eldred
Attorney Docket No.: LMORIN1260-1

Pages: - 29 - (including this form) Originals:

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# TRANSMITTAL FORM

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Total Number of Pages in This Submission: 28

| | |
|---|---|
| Application Number | 10/768,097 |
| Filing Date | January 27, 2004 |
| First Named Inventor | John Terrell Rickard |
| Art Unit | 3644 |
| Examiner Name | John W. Eldred |
| Attorney Docket Number | LMORIN1260-1 |

## ENCLOSURES *(Check all that apply)*

- ☐ Fee Transmittal Form
  - ☐ Fee Attached
- ☑ Amendment/Reply
  - ☐ After Final
  - ☐ Affidavits/declaration(s)
- ☑ Extension of Time Request - 3 mos.
- ☐ Express Abandonment Request
- ☐ Information Disclosure Statement
- ☐ Certified Copy of Priority Document(s)
- ☐ Reply to Missing Parts/ Incomplete Application
  - ☐ Reply to Missing Parts under 37 CFR 1.52 or 1.53
- ☐ Drawing(s)
- ☐ Licensing-related Papers
- ☐ Petition
- ☐ Petition to Convert to a Provisional Application
- ☐ Power of Attorney, Revocation Change of Correspondence Address
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- ☐ Appeal Communication to TC (Appeal Notice, Brief, Reply Brief)
- ☐ Proprietary Information
- ☐ Status Letter
- ☑ Other Enclosure(s) (please identify below):
  1. Amendment Transmittal (Large Entity) (x2) - w/ Facsimile Certificate of Transmission
  2. Facsimile Certificate of Transmission w/ Response

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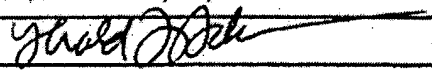
| Signature |  | | |
| Printed name | Gerald T. Sekimura | | |
| Date | January 9, 2006 | Reg. No. | 30,130 |

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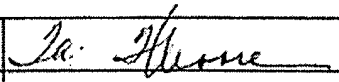
| Signature |  | | |
| Typed or printed name | To-Tonisha L. Moore | Date | January 9, 2006 |

| AMENDMENT TRANSMITTAL LETTER (Large Entity)<br>Applicant(s): John Terrell Rickard | Docket No.<br>LMORIN1260-1 |
|---|---|

| Serial No. | Filing Date | Examiner | Group Art Unit |
|---|---|---|---|
| 10/766,097 | January 27, 2004 | John W. Eldred | 3644 |

Invention: SYSTEM AND METHOD FOR DEFENSE OF AIRCRAFT AGAINST SURFACE TO AIR MISSILE ATTACK

TO THE ASSISTANT COMMISSIONER FOR PATENTS:

Transmitted herewith is an amendment in the above-identified application.

The fee has been calculated and is transmitted as shown below.

CLAIMS AS AMENDED

| | CLAIMS REMAINING AFTER AMENDMENT | | HIGHEST # PREV. PAID FOR | | NUMBER EXTRA CLAIMS PRESENT | RATE | ADDITIONAL FEE |
|---|---|---|---|---|---|---|---|
| TOTAL CLAIMS | 54 | - | 54 | = | 0 | x $50.00 | $0.00 |
| INDEP. CLAIMS | 20 | - | 8 | = | 12 | x $200.00 | $2,400.00 |
| Multiple Dependent Claims (check if applicable) ☐ | | | | | | | $0.00 |
| TOTAL ADDITIONAL FEE FOR THIS AMENDMENT | | | | | | | $2,400.00 |

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- ☒ Any additional filing fees required under 37 C.F.R. 1.16.
- ☐ Any patent application processing fees under 37 CFR 1.17.

*Signature*

Dated: January 9, 2006

Gerald T. Sekimura (Reg. No. 30,103)
DLA Piper Rudnick Gray Cary US LLP
153 Townsend Street, Suite 800
San Francisco, CA 94107

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| **PETITION FOR EXTENSION OF TIME UNDER 37 CFR 1.136(a)**<br>**FY 2005**<br>***(Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818).)*** | Docket Number (Optional)<br>LMORIN1260-1 |
|---|---|
| Application Number 10/766,097 | Filed January 27, 2004 |
| For System and Method for Defense of Aircraft Against Surface to Air Missile Attack | |
| Art Unit 3644 | Examiner John W. Eldred |

This is a request under the provisions of 37 CFR 1.136(a) to extend the period for filing a reply in the above identified application.

The requested extension and fee are as follows (check time period desired and enter the appropriate fee below):

| | | Fee | Small Entity Fee | |
|---|---|---|---|---|
| ☐ | One month (37 CFR 1.17(a)(1)) | $120 | $60 | $ _____ |
| ☐ | Two months (37 CFR 1.17(a)(2)) | $450 | $225 | $ _____ |
| ☒ | Three months (37 CFR 1.17(a)(3)) | $1020 | $510 | $ 1020 |
| ☐ | Four months (37 CFR 1.17(a)(4)) | $1590 | $795 | $ _____ |
| ☐ | Five months (37 CFR 1.17(a)(5)) | $2160 | $1080 | $ _____ |

☐ Applicant claims small entity status. See 37 CFR 1.27.

☐ A check in the amount of the fee is enclosed.

☐ Payment by credit card. Form PTO-2038 is attached.

☐ The Director has already been authorized to charge fees in this application to a Deposit Account.

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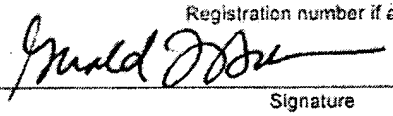
I am the

☐ applicant/inventor.

☐ assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed (Form PTO/SB/96).

☒ attorney or agent of record. Registration Number 30,103

☐ attorney or agent under 37 CFR 1.34. Registration number if acting under 37 CFR 1.34 _____.



Signature — January 9, 2006 (Date)

Gerald T. Sekimura (Typed or printed name) — (415) 836-2500 (Telephone Number)

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below.

☒ Total of 1 forms are submitted.

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328424-165027

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| | | | |
|---|---|---|---|
| Appl. No. | : | 10/766,097 | Confirmation No. 3201 |
| Applicant | : | John Terrell Rickard | |
| Filed | : | January 27, 2004 | |
| TC/A.U. | : | 3644 | |
| Examiner | : | John W. Eldred | |
| Docket No. | : | 328424-165027 | |
| Customer No. | : | 29585 | |

Commissioner for Patents
P.O. Box 1450
Alexandria VA 22313-1450

## RESPONSE TO OFFICE ACTION DATED JULY 7, 2005

Sir:

Responsive to the Official Action, mailed July 7, 2005, and having a shortened statutory period for response of three (3) months, please amend the subject application as follows.

Amendments, if any, to the Claims are reflected in the listing of claims which begins on page 2 of this paper.

Remarks/Arguments begin on page 16 of this paper.

## AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

### Listing of Claims:

1. (currently amended) A countermeasure ("CM") system for the defense of aircraft against missile attack, said system comprising:

a dispenser mounted on an aircraft and configured to dispense a substance into an area within an attack envelope of said aircraft, said substance emitting radiation in a first wavelength band when non-reactively excited by incident radiation in a second wavelength band; and

at least one exciter configured to generate illuminating radiation in said second wavelength band, and to direct said illuminating radiation toward said area.

2. (original) A CM system according to claim 1, wherein:

said at least one exciter is configured to generate said illuminating radiation in response to the determination of a missile attack within said attack envelope of said aircraft; and

said dispenser is configured to dispense said substance in response to the determination of said missile attack.

3. (currently amended) A countermeasure ("CM") system for the defense of aircraft against missile attack, said system comprising:

a dispenser mounted on an aircraft and configured to dispense a substance into an area within an attack envelope of said aircraft, said substance emitting radiation in a first wavelength band when excited by incident radiation in a second wavelength band; and

at least one exciter configured to generate illuminating radiation in said second wavelength band, and to direct said illuminating radiation toward said area [[A CM system according to claim 1]], wherein said substance comprises nanocrystals.

4. (original) A CM system according to claim 1, wherein said substance emits infrared radiation when excited by said incident radiation.

5. (original) A CM system according to claim 1, wherein the wavelength of said incident radiation is shorter than the wavelength of radiation emitted by said substance.

6. (original) A CM system according to claim 1, wherein the wavelength of radiation emitted by said substance approximates the wavelength of emissions produced by engine exhaust of said aircraft.

7. (currently amended) A countermeasure ("CM") system for the defense of aircraft against missile attack, said system comprising:

a dispenser mounted on an aircraft and configured to dispense a substance into an area within an attack envelope of said aircraft, said substance emitting radiation in a first wavelength band when excited by incident radiation in a second wavelength band; and

at least one exciter configured to generate illuminating radiation in said second wavelength band, and to direct said illuminating radiation toward said area [[A CM system according to claim 1]], wherein said at least one exciter is ground-based.

8. (original) A CM system according to claim 1, wherein said at least one exciter comprises at least one laser emitter.

9. (currently amended) A countermeasure ("CM") system for the defense of aircraft against missile attack, said system comprising:

a dispenser mounted on an aircraft and configured to dispense a substance into an area within an attack envelope of said aircraft, said substance

emitting radiation in a first wavelength band when excited by incident radiation in a second wavelength band; and

at least one exciter configured to generate illuminating radiation in said second wavelength band, and to direct said illuminating radiation toward said area, wherein said at least one exciter comprises at least one laser emitter, and further [[A CM system according to claim 8,]] wherein said at least one laser emitter tracks said aircraft within said attack envelope of said aircraft.

10. (currently amended) A countermeasure ("CM") system for the defense of aircraft against missile attack, said system comprising:

a dispenser mounted on an aircraft and configured to dispense a substance into an area within an attack envelope of said aircraft, said substance emitting radiation in a first wavelength band when excited by incident radiation in a second wavelength band; and

at least one exciter configured to generate illuminating radiation in said second wavelength band, and to direct said illuminating radiation toward said area, wherein said at least one exciter comprises at least one laser emitter, and further [[A CM system according to claim 8,]] wherein said at least one laser emitter tracks said aircraft on [[approach/departure]] on approach or departure of said aircraft.

11. (original) A CM system according to claim 1, further comprising at least one detector configured to detect events indicative of the presence of a missile within said attack envelope of said aircraft.

12. (original) A CM system according to claim 11, wherein said at least one detector comprises at least one Doppler-sensitive radar.

13. (original) A CM system according to claim 11, wherein said at least one detector comprises at least one visual imaging element.

14. (original) A CM system according to claim 11, wherein said at least one detector comprises at least one infrared imaging element.

15. (original) A CM system according to claim 11, further comprising an engagement control subsystem in communication with said at least one detector, with said at least one exciter, and with said dispenser, said engagement control subsystem being configured to analyze data corresponding to said events to determine whether a missile is present within said attack envelope, to control said at least one exciter, and to control said dispenser.

16. (original) A CM system according to claim 15, wherein said engagement control subsystem is configured to activate said at least one exciter in response to the determination of said missile attack.

17. (original) A CM system according to claim 15, wherein said engagement control subsystem is configured to control tracking of said at least one exciter relative to said aircraft.

18. (original) A CM system according to claim 15, wherein:

said engagement control subsystem comprises a transmitter configured to transmit an engagement signal in response to the determination of said missile attack; and

said dispenser is configured to dispense said substance upon receipt of said engagement signal.

19. (original) A CM system according to claim 18, further comprising an engagement signal receiver mounted on said aircraft, said engagement signal receiver being configured to receive said engagement signal.

20. (original) A CM system according to claim 19, wherein said dispenser includes said engagement signal receiver.

21. (currently amended) A countermeasure ("CM") method for the defense of aircraft against missile attack, said method comprising:

dispensing an aerosol of a substance into a region proximate an aircraft in response to the determination of a missile attack within an attack envelope of said aircraft, said substance emitting radiation in a first wavelength band when non-reactively excited by incident radiation in a second wavelength band; and

illuminating said region with radiation in said second wavelength band.

22. (original) A CM method according to claim 21, wherein said illuminating step is performed in response to the determination of said missile attack within said attack envelope of said aircraft.

23. (original) A CM method according to claim 21, further comprising:

detecting events indicative of the presence of a missile within said attack envelope of said aircraft; and

determining, in response to said detecting step, the presence of a missile within said attack envelope of said aircraft.

24. (original) A CM method according to claim 21, further comprising transmitting an engagement signal in response to the determination of said missile attack within said attack envelope of said aircraft, wherein said dispensing step is performed in response to the transmission of said engagement signal.

25. (currently amended) A countermeasure ("CM") subsystem for the defense of aircraft against missile attack, said subsystem comprising:

a controller configured to receive an engagement signal indicative of the presence of a missile within an attack envelope of an aircraft; and

an exciter connected to said controller, said exciter being configured to generate, in response to said engagement signal, [[an]] a non-reactive excitation signal

and to direct said excitation signal at an area, proximate said aircraft, that contains a substance dispensed in response to the presence of said missile within said attack envelope of said aircraft; wherein

said excitation signal has properties that cause said substance to emit radiation having characteristics that approximate characteristics of engine exhaust of said aircraft.

26. (original) A CM subsystem according to claim 25, wherein:

said substance emits radiation in a first wavelength band when excited by incident radiation in a second wavelength band; and

said excitation signal comprises radiation in said second wavelength band.

27. (original) A CM subsystem according to claim 26, wherein the wavelength of said excitation signal is shorter than the wavelength of radiation emitted by said substance.

28. (currently amended) A countermeasure ("CM") subsystem for the defense of aircraft against missile attack, said subsystem comprising:

a controller configured to receive an engagement signal indicative of the presence of a missile within an attack envelope of an aircraft; and

an exciter connected to said controller, said exciter being configured to generate, in response to said engagement signal, an excitation signal and to direct said excitation signal at an area, proximate said aircraft, that contains a substance dispensed in response to the presence of said missile within said attack envelope of said aircraft; wherein

said excitation signal has properties that cause said substance to emit radiation having characteristics that approximate characteristics of engine exhaust of

said aircraft, and further [[A CM subsystem according to claim 25,]] wherein said exciter is ground-based.

29. (original) A CM subsystem according to claim 25, wherein said exciter comprises at least one laser emitter.

30. (currently amended) A countermeasure ("CM") subsystem for the defense of aircraft against missile attack, said subsystem comprising:

a controller configured to receive an engagement signal indicative of the presence of a missile within an attack envelope of an aircraft; and

an exciter connected to said controller, said exciter being configured to generate, in response to said engagement signal, an excitation signal and to direct said excitation signal at an area, proximate said aircraft, that contains a substance dispensed in response to the presence of said missile within said attack envelope of said aircraft; wherein

said excitation signal has properties that cause said substance to emit radiation having characteristics that approximate characteristics of engine exhaust of said aircraft, wherein said exciter comprises at least one laser emitter, and further [[A CM subsystem according to claim 29,]] wherein said controller causes said at least one laser emitter to track said aircraft within said attack envelope of said aircraft.

31. (currently amended) A countermeasure ("CM") subsystem for the defense of aircraft against missile attack, said subsystem comprising:

a controller configured to receive an engagement signal indicative of the presence of a missile within an attack envelope of an aircraft; and

an exciter connected to said controller, said exciter being configured to generate, in response to said engagement signal, an excitation signal and to direct said excitation signal at an area, proximate said aircraft, that contains a substance

dispensed in response to the presence of said missile within said attack envelope of said aircraft; wherein

said excitation signal has properties that cause said substance to emit radiation having characteristics that approximate characteristics of engine exhaust of said aircraft, wherein said exciter comprises at least one laser emitter, and further [[A CM subsystem according to claim 29,]] wherein said controller causes said at least one laser emitter to track said aircraft on [[approach/departure]] approach or departure of said aircraft.

32. (currently amended) A countermeasure ("CM") method for the defense of aircraft against missile attack, said method comprising:

receiving an engagement signal indicative of the presence of a missile within an attack envelope of an aircraft;

generating, in response to said engagement signal, [[an]] a non-reactive excitation signal; and

directing said excitation signal at an area, proximate said aircraft, that contains a substance dispensed in response to the presence of said missile within said attack envelope of said aircraft; wherein

said excitation signal has properties that cause said substance to emit radiation having characteristics that approximate characteristics of engine exhaust of said aircraft.

33. (original) A CM method according to claim 32, further comprising tracking said aircraft with said excitation signal.

34. (currently amended) A countermeasure ("CM") subsystem for the defense of aircraft against missile attack, said subsystem comprising:

a receiver configured to receive an engagement signal indicative of the presence of a missile within an attack envelope of an aircraft; and

a dispenser mounted on said aircraft and configured to dispense a substance in response to said engagement signal, said substance emitting radiation in a first wavelength band when excited by incident non-reactive radiation in a second wavelength band.

35. (currently amended) A countermeasure ("CM") subsystem for the defense of aircraft against missile attack, said subsystem comprising:

a receiver configured to receive an engagement signal indicative of the presence of a missile within an attack envelope of an aircraft; and

a dispenser mounted on said aircraft and configured to dispense a substance in response to said engagement signal, said substance emitting radiation in a first wavelength band when excited by incident radiation in a second wavelength band [[A CM subsystem according to claim 34]], wherein said substance comprises nanocrystals.

36. (original) A CM subsystem according to claim 34, wherein said substance emits infrared radiation when excited by said incident radiation.

37. (original) A CM subsystem according to claim 34, wherein the wavelength of said incident radiation is shorter than the wavelength of radiation emitted by said substance.

38. (original) A CM subsystem according to claim 34, wherein the wavelength of radiation emitted by said substance approximates the wavelength of emissions produced by engine exhaust of said aircraft.

39. (original) A CM subsystem according to claim 34, wherein said receiver is integrated with said dispenser.

40. (currently amended) A countermeasure ("CM") method for the defense of aircraft against missile attack, said method comprising:

receiving, at an aircraft, an engagement signal indicative of the presence of a missile within an attack envelope of said aircraft; and

dispensing a substance from said aircraft in response to said engagement signal, said substance emitting radiation in a first wavelength band when excited by incident non-reactive radiation in a second wavelength band.

41. (original) A CM method according to claim 40, wherein said receiving step receives said engagement signal in a coded form.

42. (currently amended) An engagement control subsystem for the defense of aircraft against missile attack, said engagement control subsystem comprising:

a receiver configured to receive sensor data indicative of the presence of a missile within an attack envelope of an aircraft; and

a first control architecture configured to generate, in response to said sensor data, a first engagement signal for controlling at least one exciter, said at least one exciter being configured to generate [[an]] a non-reactive excitation signal and to direct said excitation signal at an area that contains a substance dispensed from said aircraft; wherein

said excitation signal has properties that cause said substance to emit radiation having characteristics that approximate characteristics of engine exhaust of said aircraft.

43. (original) An engagement control subsystem according to claim 42, further comprising a second control architecture configured to generate, in response to said sensor data, a second engagement signal for controlling the dispensing of said substance from said aircraft.

44. (original) An engagement control subsystem according to claim 43, wherein said second control architecture is further configured to generate said second engagement signal in a coded form.

45. (original) An engagement control subsystem according to claim 42, wherein said substance emits radiation in a first wavelength band when excited by incident radiation in a second wavelength band; and

said excitation signal comprises radiation in said second wavelength band.

46. (original) An engagement control subsystem according to claim 42, further comprising a processor configured to analyze said sensor data to determine whether a missile is present within said attack envelope.

47. (currently amended) An engagement control subsystem for the defense of aircraft against missile attack, said engagement control subsystem comprising:

a receiver configured to receive sensor data indicative of the presence of a missile within an attack envelope of an aircraft; and

a first control architecture configured to generate, in response to said sensor data, a first engagement signal for controlling at least one exciter, said at least one exciter being configured to generate an excitation signal and to direct said excitation signal at an area that contains a substance dispensed from said aircraft; wherein

said excitation signal has properties that cause said substance to emit radiation having characteristics that approximate characteristics of engine exhaust of said aircraft, and further [[An engagement control subsystem according to claim 42,]] wherein said first control architecture is further configured to cause said at least one exciter to track said aircraft within said attack envelope of said aircraft.

48. (currently amended) An engagement control subsystem for the defense of aircraft against missile attack, said engagement control subsystem comprising:

a receiver configured to receive sensor data indicative of the presence of a missile within an attack envelope of an aircraft; and

a first control architecture configured to generate, in response to said sensor data, a first engagement signal for controlling at least one exciter, said at least one exciter being configured to generate an excitation signal and to direct said excitation signal at an area that contains a substance dispensed from said aircraft; wherein

said excitation signal has properties that cause said substance to emit radiation having characteristics that approximate characteristics of engine exhaust of said aircraft, and further [[An engagement control subsystem according to claim 42]], wherein said first control architecture is further configured to cause said at least one exciter to track said aircraft on [[approach/departure]] approach or departure of said aircraft.

49. (currently amended) A countermeasure ("CM") method for the defense of aircraft against missile attack, said method comprising:

receiving sensor data indicative of the presence of a missile within an attack envelope of an aircraft; and

generating, in response to said sensor data, a first engagement signal for controlling at least one exciter, said at least one exciter being configured to generate [[an]] a non-reactive excitation signal and to direct said excitation signal at an area that contains a substance dispensed from said aircraft; wherein

said excitation signal has properties that cause said substance to emit radiation having characteristics that approximate characteristics of engine exhaust of said aircraft.

50. (original) A CM method according to claim 49, further comprising generating, in response to said sensor data, a second engagement signal for controlling the dispensing of said substance from said aircraft.

51. (original) A CM method according to claim 50, wherein said second engagement signal comprises a coded signal.

52. (original) A CM method according to claim 49, further comprising processing said sensor data to determine whether a missile is present within said attack envelope.

53. (currently amended) A countermeasure ("CM") method for the defense of aircraft against missile attack, said method comprising:

receiving sensor data indicative of the presence of a missile within an attack envelope of an aircraft; and

generating, in response to said sensor data, a first engagement signal for controlling at least one exciter, said at least one exciter being configured to generate an excitation signal and to direct said excitation signal at an area that contains a substance dispensed from said aircraft; wherein

said excitation signal has properties that cause said substance to emit radiation having characteristics that approximate characteristics of engine exhaust of said aircraft [[A CM method according to claim 49]], further comprising controlling said at least one exciter to track said aircraft within said attack envelope of said aircraft.

54. (currently amended) A countermeasure ("CM") method for the defense of aircraft against missile attack, said method comprising:

receiving sensor data indicative of the presence of a missile within an attack envelope of an aircraft; and

generating, in response to said sensor data, a first engagement signal for controlling at least one exciter, said at least one exciter being configured to generate an

excitation signal and to direct said excitation signal at an area that contains a substance dispensed from said aircraft; wherein

said excitation signal has properties that cause said substance to emit radiation having characteristics that approximate characteristics of engine exhaust of said aircraft [[A CM method according to claim 49]], further comprising controlling said at least one exciter to track said aircraft on [[approach/departure]] approach or departure of said aircraft.

## REMARKS

Reconsideration of the subject application, as amended, is respectfully requested.

**Claims 10, 31, 48 and 54:**

The Examiner has rejected claims 10, 31, 48 and 54 under 35 USC 112, second paragraph, asserting that the term "on approach/departure" in these claims is indefinite. The Examiner has also indicated that claims 10, 31, 48 and 54 would be allowable if rewritten to overcome the rejection(s) under 35 USC 112, second paragraph, and to include all of the limitations of the base claim and any intervening claims. By this amendment, claims 10, 31, 48 and 54 have been amended to substitute the phrase – approach or departure of said aircraft – for the phrase "on approach/departure." Also, claims 10, 31, 48 and 54 have been amended to include all of the limitations of their base claim and any intervening claims. Accordingly, it is respectfully submitted that these claims are now definite and allowable.

**Claims 3, 7, 9, 28, 30, 35, 47, and 53:**

The Examiner has objected to claims 3, 7, 9, 28, 30, 35, 47, and 53, and indicated that they would be allowable if rewritten to include all of the limitations of the base claim and any intervening claims. By this amendment claims 3, 7, 9, 28, 30, 35, 47, and 53 have been amended to include all of the limitations of their base claim and any intervening claims. Accordingly, it is respectfully submitted that these claims are now allowable.

**Claims 1, 2, 4-6, 11-27, 29, 32-24, 36-46, and 49-52:**

Claims 1, 2, 4-6, 11-27, 29, 32-24, 36-46, and 49-52 have been rejected by the Examiner under 35 USC 103(a) as being unpatentable over Campillo et al. (H1522) in view of Hicks et al. (6,674,520).

Independent claims 1, 21, 25, 32, 34, 40, 42, and 49 have been amended to clarify that the excitation mechanism involved in these claims is "non-reactive." Support for this amendment can be found in the subject specification, for example at page 2, paragraphs 0005 and 0006, and page 23, paragraphs 0091 and 0093. In these paragraphs the prior art use of reactive mechanisms, such as flammable substances, is contrasted with the non-reactive excitation mechanisms, such as fluorescing nanocrystals, disclosed in the preferred embodiment of the invention. Thus, amended independent claims 1, 21, 25, 32, 34, 40, 42, and 49 more clearly distinguish Campillo et al (H1522) which employs reactive mechanisms.

As described in the response filed on 13 April 2005, in one embodiment, Campillo *et al.* teach the use of substances which operate through "photochemical reaction" or "exothermic reaction" to release chemical energy stored in the material, in order to generate the desired infrared source. *See*, Campillo *et al.*, at col. 3, line 3 through col. 5, line 6, for example. It is respectfully submitted that the non-reactive mechanism recited in amended independent claims 1, 21, 25, 32, 34, 40, 42, and 49 is different from the "photochemical reaction" or "exothermic reaction" mechanisms taught by Campillo *et al.*, because the non-reactive excitation mechanism does not cause a "photochemical reaction" or "exothermic reaction" to occur. A clear disadvantage of using substances which burn in order to release heat, such as taught in this embodiment of Campillo *et al.*, is that the substances themselves pose an additional hazard to the aircraft being protected to the extent such substances are dispensed from the aircraft and therefore are a combustion source which must be carried on-board the aircraft. Another benefit of the claimed invention is that a continuous quantum fluorescent emission is provided in the first wavelength band as long as the radiation in the second wavelength band is incident. In comparison, in the first embodiment in Campillo *et al.* the material is rapidly consumed as a part of the "photochemical" or "exothermic" reaction.

The alternate embodiment described in Campillo *et al.* is even more different from the claimed invention. Specifically, the alternate embodiment uses substances which scatter incident light – that is without emitting light (as recited in claims 25, 32, 42

and 49, and their dependent claims), much less emitting light of a wavelength band different from the wavelength band of the incident light (as is recited in claims 1, 21, 34, and 40, and their dependent claims). See, Campillo et al., col. 5, lines 7-12.

For at least the foregoing reasons, it is respectfully submitted that independent claims 1, 21, 25, 32, 34, 40, 42, and 49, and the claims dependent therefrom are allowable over the prior art cited and relied upon by the Examiner.

Conclusion:

For the foregoing reasons, it is respectfully submitted that claims 1-54 are allowable over the cited prior art and the application is now in condition for allowance, and the Examiner's indication to that end is respectfully requested.

Respectfully submitted,
DLA Piper Rudnick Gray Cary US LLP

Dated: January 9, 2006 By: 

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|---|---|
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Notice of ABANDONMENT

Please find below and/or attached an Office communication concerning this application or proceeding.



PATENT DOCKET
DATE: 10/27/6- MM
ACTION: Revive Application
DUE: 12-27-6
DEAD: 4-27-7

| Notice of Abandonment | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/766,097 | RICKARD, JOHN TERRELL | |
| | Examiner | Art Unit | |
| | J. Woodrow Eldred | 3641 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--*

This application is abandoned in view of:

1. ☒ Applicant's failure to timely file a proper reply to the Office letter mailed on *23 March 2006*.
   (a) ☐ A reply was received on _____ (with a Certificate of Mailing or Transmission dated _____), which is after the expiration of the period for reply (including a total extension of time of _____ month(s)) which expired on _____.
   (b) ☐ A proposed reply was received on _____, but it does not constitute a proper reply under 37 CFR 1.113 (a) to the final rejection.
   (A proper reply under 37 CFR 1.113 to a final rejection consists only of: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114).
   (c) ☐ A reply was received on _____ but it does not constitute a proper reply, or a bona fide attempt at a proper reply, to the non-final rejection. See 37 CFR 1.85(a) and 1.111. (See explanation in box 7 below).
   (d) ☒ No reply has been received.

2. ☐ Applicant's failure to timely pay the required issue fee and publication fee, if applicable, within the statutory period of three months from the mailing date of the Notice of Allowance (PTOL-85).
   (a) ☐ The issue fee and publication fee, if applicable, was received on _____ (with a Certificate of Mailing or Transmission dated _____), which is after the expiration of the statutory period for payment of the issue fee (and publication fee) set in the Notice of Allowance (PTOL-85).
   (b) ☐ The submitted fee of $_____ is insufficient. A balance of $_____ is due.
   The issue fee required by 37 CFR 1.18 is $_____. The publication fee, if required by 37 CFR 1.18(d), is $_____.
   (c) ☐ The issue fee and publication fee, if applicable, has not been received.

3. ☐ Applicant's failure to timely file corrected drawings as required by, and within the three-month period set in, the Notice of Allowability (PTO-37).
   (a) ☐ Proposed corrected drawings were received on _____ (with a Certificate of Mailing or Transmission dated _____), which is after the expiration of the period for reply.
   (b) ☐ No corrected drawings have been received.

4. ☐ The letter of express abandonment which is signed by the attorney or agent of record, the assignee of the entire interest, or all of the applicants.

5. ☐ The letter of express abandonment which is signed by an attorney or agent (acting in a representative capacity under 37 CFR 1.34(a)) upon the filing of a continuing application.

6. ☐ The decision by the Board of Patent Appeals and Interference rendered on _____ and because the period for seeking court review of the decision has expired and there are no allowed claims.

7. ☐ The reason(s) below:

J. Woodrow Eldred
Primary Examiner
Art Unit: 3641

Petitions to revive under 37 CFR 1.137(a) or (b), or requests to withdraw the holding of abandonment under 37 CFR 1.181, should be promptly filed to minimize any negative effects on patent term.